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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/942,673	08/31/2001	Eric Bouffard	P 283115	7804

909 7590 11/22/2002

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EXAMINER

FISCHMANN, BRYAN R

ART UNIT	PAPER NUMBER
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3618

DATE MAILED: 11/22/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/942,673

Applicant(s)
BOUFFARD, ET AL

Examiner
Bryan Fischmann

Art Unit
3618



— The MAILING DATE of this communication appears on the cover sheet with the correspondence address —

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Aug 31, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Aug 31, 2001 is/are a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☒ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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Specification

1. The disclosure is objected to because of the following:

A) The following recited phrases are unclear, awkwardly worded, and/or grammatically incorrect:

1) Paragraph 0025 recites "In embodiments". It seems that a word such as "the", "all" or "some" should appear in the above recitation after the word "In".

2) To be grammatically correct, the recitation of "which is" on the penultimate line of paragraph 0053 is believed to be correctly recited "which are".

3) It is requested Applicant update the status of the patent applications listed on the last two lines of paragraph 0053.

4) Paragraph 0054 recites "Figure 13 schematically shows...the slot 504...". Figure 13 fails to illustrate reference number 504.

5) paragraph 0052-0055 recites "rear fenders 516", or "fenders 516". The use of the term "fenders" (plural) is objected to, as Figures 13 and 13B show reference number 516 to be a single "fender", not two "separate" fenders, as might be seen on the left and right sides of a front of an automobile.

B) The following inconsistencies in nomenclature were noted:

1) Paragraph 0007 recites "ventilation openings 120". Paragraph 0008 recites "main frame 120".

2) Paragraph 0012 recites both "inlets...722" and "inlets...720".

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3) Paragraph 0045, 0053, 0054 and 0057 recites "seat 507". Paragraphs 0052 and 0054 recites "aperture 507".

4) Paragraph 0050 recites "support plate 126". Paragraph 0051 recites "lateral extensions 126".

5) Paragraph 0053 recites "rear fenders 516". Paragraph 0054 and 0055 recites "fenders 516". Paragraph 0054 recites "right fender 516".

6) Paragraph 0055 recites "intake opening 360". Paragraph 0055 also recites "aperture 360". Paragraph 0056 also recites "aperture 360".

7) Paragraph 0055 recites "intake opening 360". Paragraph 0055 and 0056 recites "aperture 360".

To avoid confusion to the reader, and to facilitate identifying components by nomenclature in the claims, it is requested Applicant use consistent nomenclature for the same reference number throughout the specification.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign mentioned in the description: 17 (sheet 3).

Correction is required.

3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference signs not mentioned in the description: 113 (Figure 2A), 13

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(Figure 3), 311 (Figure 5), 306 and 450 (Figure 6), "H", 306 and 450 (Figure 7), 306 (Figure 8), 351 (Figure 9). Correction is required.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "507" has been used to designate both a seat (Figure 12) and an aperture (Figure 13). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the engine mounted on the frame recited in claims 1, 19 and 25, the one opening not located directly vertically of the engine in claim 13, the engine and an airbox positioned "adjacent" an engine as recited in claim 18, a radiator positioned adjacent an engine as recited in claim 26 and an intake pipe extending away from an engine towards the rear of the vehicle in as recited in claim 29 must be shown or the features canceled from the claims. No new matter should be entered.

Note that all drawing objections in the above paragraph refer directly, or indirectly to an "engine". As best understood from examination of the drawings, the "engine" is only shown in "related art" Figures 1A, 1B and 2B. No reference number corresponding to an "engine" is found corresponding to Figures 5-14, which comprise the Instant Invention, as was the case for related art Figures 1A, 1B and 2B. Due to this, it is not clear that Applicant has illustrated an engine, or an engine relative to other components, as described above.

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6. The reference number 520 on Figure 12 and some of the reference numbers on Figure 13B are objected to, as not being uniform and well defined.

7. Reference number 352 on Figure 5 has a lead line which is directed toward a pipe (306B). Reference number 352 is described in paragraph 0046 as a “carburetor”.

8. Paragraph 0036 recites “Figure 8 is a top plan view of the air intake system of Figure 5”. To be consistent, there should be “section lines” on Figure 5 similar to the section lines for Figures 9 and 10 in Figure 8 to indicate that Figure 8 is a “top plan view”. Also the term “top plan view” is considered redundant, due to the fact that, as best understood, the term “plan view” is synonymous with the term “top view”.

Similarly, “section lines” should appear on Figure 12 to indicate Figure 13A is a “top plan view” of Figure 12. See paragraph 0042.

9. The “lead line” for reference number 312 on Figure 13 seems to terminate “prematurely”. The lead line for reference number 312, as best understood, should extend to the edge of air intake pipe 302, or at least closer to it, than it presently is.

Claim Objections

10. Claims 1-24 are objected to because of the following:

A) Claims 1, 3, 8, 10, 11, 19-23 are objected to due to the following:

Claims 1, 3, 8, 10, 11 and 19-23 recite “rear fenders”. However, note that Figure 13 shows that there is only a single rear fender 516, not a plurality of “fenders”.

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B) Claim 4 recites "...wherein the inlet end of the intake pipe is positioned above the rear wheels so as to avoid interaction with a water wave created in front of the vehicle when the vehicle travels through water.

This recited phrase is objected to, as it is "inconsistent" with Figure 14. Figure 14 shows the water wave "W", not "in front" of the vehicle, but instead in a "front portion" of the vehicle.

See also a similar recitation in claim 14.

C) Claim 5 recites "wherein intake pipe". It is believed the "readability" of this recitation is improved if the word "the" is inserted after the word "wherein".

D) Claims 7-24 recites the term "straddle type vehicle". It is believed that a hyphen should appear between the words "straddle" and "type" in the above term.

E) Claim 16 recites "wherein an end of the air intake pipe extends within the seat". As best understood, the recitation of "air intake pipe" refers to reference number 302. Examination of Figures 12 -13B show that the air intake pipe is not "within" the seat, but merely "underneath" the seat. Note that Webster's Collegiate Dictionary, 10th Edition, defines "within" as: "in, or "into the interior".

For purposes of examination, an air intake pipe that is underneath a seat will be assumed to meet the above claim 16 limitation.

F) Claim 19 recites "...at least one opening being provided within at least one of the rear fenders".

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Claim 19 is dependant upon claim 18. Claim 18 recites "...at least one opening...the at least one opening being positioned on the vehicle so as to avoid water entering the at least one opening...". From this, it is best understood that the "at least one opening" is an "exterior opening", such as reference number 520, or even "opening" 806 of Figure 13B, as opposed to an "interior opening" such as reference number 360.

Due to this, the word "within" in the above recitation is objected to. A more appropriate word in lieu of the word "within " is believed to be the word "on", or words "at the outer surface".

G) Claim 22 recites "wherein the air intake box includes an intake pipe having an inlet end adjacent to only one of the rear fenders".

This recited phrase is objected to due to the following:

Note that Webster's Collegiate Dictionary, 10th Edition, defines "adjacent" as: "not distant". Note that Figure 13 of Japanese Patent 3213482 show that the air intake pipe 302 is "not distant" from either side of rear fender 506 when considered in the context of the overall dimensions of the straddle-type vehicle.

Claim Rejections - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 7, 8, and 13, 14 and 16, as best understood (see claim objections), are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 3213482.

Japanese Patent 3213482 teaches a straddle-type vehicle (Figure 1) comprising:

an engine (E);

a seat having a front portion (13) positioned generally above the engine (Figure 1);

an air intake system (38, 39 and 50-52) operatively connected to the engine; and

at least one opening (50 - forward end) adjacent (see comments below) a rear portion of the seat and supplying intake air to the air intake system.

Regarding the claim 8 recitation “at least one opening adjacent a rear portion of the seat”, note that Webster’s Collegiate Dictionary, 10th Edition, defines “adjacent” as: “not distant”. Note that Figures 1 and 2 of Japanese Patent 3213482 show that the air opening (50) is “not distant” from a rear portion of the seat when considered in the context of the overall dimensions of the straddle-type vehicle.

Regarding claim 13, see Figure 2 of Japanese Patent 3213482.

Regarding claim 14, note the height of 50 relative to the rear wheel in Figure 2. Also note that the recitation of “water wave created in front of the vehicle when the vehicle travels through water” may be satisfied by a water “height”, or “depth” of, say, 1-inch which will create a very small wave.

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Regarding claim 16, see Figure 1 and the claim objection portion of this Office Action.

13. Claims 7, 15 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 1301484.

Japanese Patent 1301484 teaches a straddle-type vehicle (Figure 3) comprising:

an engine (1);

a seat (Figure 3) having a front portion positioned generally above (see Figure 3 and comments below) the engine;

an air intake system (Figures 1 and 3 including reference numbers 7 and 12) operatively (Figure 1) connected to the engine; and

at least one opening (Figure 3 - see comments below) adjacent a rear portion of the seat and supplying intake air to the air intake system.

Regarding the claim 7 recitation of “a seat having a front portion positioned generally above” the engine, note that Figure 3 shows that the front of the seat is at a higher “elevation” than the front portion of the seat.

Regarding the claim 7 recitation of “at least one opening adjacent a rear portion of the seat and supplying intake air to the air intake system”, the “opening” in this recitation is the “opening” in the body of the straddle-type vehicle bounded by the rear portion of the seat on the top, back and sides and which is “open” at the bottom and front and from which reference 12 takes suction. Note that Webster’s Collegiate Dictionary 10th Edition defines “opening” as: “something that is open” and “open” as: “being in a position...to allow passage”. Note that the

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"opening" in the seat allows passage of air from the atmosphere to reference number 12 and therefore may be considered to be an opening supplying intake air to the air intake system since air must pass through this "opening" from the atmosphere in order to reach the engine.

Regarding claim 15, as noted above, Figure 3 shows the rear portion of the seat forms the "opening".

Regarding claim 17, see Figure 3.

14. Claims 18, 19 and 22-24, as best understood (see claim objections), are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent 3213482.

Japanese Patent 3213482 teaches a straddle-type vehicle (Figure 1) having front and rear wheels (Figure 1) and being capable of traversing water having a predetermined depth (say 1") comprising:

an engine (E);

an air intake box (38) positioned adjacent the engine (see comments below); and

at least one opening (50 - forward end) in communication with the air box, the at least one opening being positioned on the vehicle rearward of the front wheels (Figure 1) so that a height of the opening is greater than the predetermined depth (1") of the water, the at least one opening being positioned (at a relatively high height on the vehicle) on the vehicle so as to avoid water entering the at least one opening due to encountering a water wave created in front of the vehicle that has a wave depth greater than the predetermined depth of the water.

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Regarding the claim 18 recitation “at least one opening adjacent a rear portion of the seat”, note that Webster’s Collegiate Dictionary, 10th Edition, defines “adjacent” as: “not distant”. Note that Figures 1 and 2 of Japanese Patent 3213482 show that the air opening (50-forward portion) is “not distant” from the engine “E” when considered in the context of the overall dimensions of the straddle-type vehicle.

Regarding claim 19, the “rear fender” is reference number 3 of Figure 1. Note that Figures 1 and 2 show reference number 3 to extend downward to cover most of reference number 50, particularly the forward portion, and part of reference number 38. Also note that Webster’s Collegiate Dictionary, 10th Edition, defines “within” as: “in, or into the interior” and “interior” as: “lying, occurring, or functioning within the limiting boundaries”. From this, it can be seen from Figures 1 and 2 of Japanese Patent 3213482 that the opening (forward end of 50) lies “within” the limiting boundaries of reference number 3.

Regarding the recitation of “rear fenders” (plural) in claim 19, note that the straddle-type vehicle may be broadly considered to have a fender on each side of the centerline of the vehicle. Also note that Applicant shows only a single rear fender on Figure 13. See also the claim objection portion of this Office Action.

Regarding claim 22, see Figures 1-3 and the claim objection portion of this Office Action.

Regarding claim 23, see Figures 1-3, also noting the previously cited definition for the term “adjacent”. See also the claim objection portion of this Office Action.

Regarding claim 24, see Figure 2.

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Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. Claims 1 and 3-6, as best understood (see claim objections), are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 61-200029.

Japanese Patent 61-200029 teaches a vehicle having a frame (Figures 2-4) and front and rear wheels suspended from the frame (Figures 1-4) comprising:

a pair of rear fenders (10 - rear portion - see comments below) attached to the frame, the rear fenders having at least one ventilation opening;

an engine (58) mounted on the frame (Figures 2 and 3) and between the rear fenders (Figures 2 and 3), the engine providing motive power to at least one of the front and rear wheels (Figure 3); and

an air intake box (80) connected (via vehicle structure) to the frame and supplying intake air to the engine, the air intake box including an intake pipe (82) connected to and receiving intake air from the at least one ventilation opening (88).

Japanese Patent 61-200029 fails to explicitly state that the vehicle is an "all terrain vehicle".

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However, an “all terrain vehicle” is understood to be used “off-road” as well as “on-road”. Note that the English Language abstract for Japanese Patent 61-200029 recites “To make it hard for an air cleaner to suck in...up flung dust due to wheels...”. This recitation is a clear indication that the vehicle is intended to be used “off-road”, as if the vehicle was used only on “paved roads”, there would be no “up flung dust”. Also note that the “rugged” construction of the frame and suspension system facilitates off-road use of the vehicle.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 61-200029 may be considered an “all terrain vehicle”.

Also note regarding the recitation of “An all terrain vehicle” in the preamble of claim 1, Section 2111.02 of the MPEP recites “Any terminology in the preamble that limits the structure of the claim limitation must be treated as a claim limitation....If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states...the purpose or intended use of the invention...then the preamble is not considered a limitation...”. Since the above preamble recitation only recites intended use and does not contain any structural limitations, any device that meets the limitations of the body of claim 1 will be understood to also meet the preamble limitations since any device that meets the limitations of the body of claim 1 will be able to functionally perform the intended use recited in the preamble.

Regarding the recitation of “rear fenders” (plural) in claim 1, note that the “all terrain vehicle” may be broadly considered to have a fender on each side of the centerline of the vehicle.

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Also note that Applicant shows only a single rear fender on Figure 13. See also the claim objection portion of this Office Action.

Regarding the claim 3 recitation of a seat located “between” the rear fenders, note that Webster’s Collegiate Dictionary, 10th Edition, defines “between” as: “an intermediate space”. Note that the seat of Japanese Patent 61-200029 may broadly be considered to be “between” the rear fenders, even though the seat is “forward” of the rear fenders, just as Texas may be considered to be “between” Washington DC and Seattle, even though Texas is not located in a straight line between these two cities. Regarding the claim 3 recitation “the intake pipe including an inlet end positioned adjacent a rear lateral portion of the seat”. Note that Figure 4 of Japanese Patent 61-200029 shows the seat back 32a is “adjacent” the intake pipe 82, particularly when the previously given definition of “adjacent” is used. Also see the claim objection portion of this Office Action regarding the term “rear fenders”.

Regarding claim 4, see Figure 4.

Regarding claim 5 and 6, see Figure 2, noting the connection of reference number 82, which is configured as a hose to reference number 86 which is configured as a short length of pipe commonly known as a “nipple” and 84. Although not taught by Japanese Patent 61-200029, the Examiner takes Official Notice that hoses, especially where relatively low pressures are involved, are commonly attached to pipes or nipples by clamps or clips. An example of a clamp is a “hose clamp” used on many cars. An example of a clip is a “c-clip” also used in cars, on vacuum cleaner hoses etc. A hose clamp is advantageous in that it offers 360 degree clamping of

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the hose, minimizing the hose coming loose. A “c-clip” is advantageous in that the clip may be installed, or removed without the “joint” being broken. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a fastener such as a hose clamp or c-clip where reference numbers 82 and 86 of Figure 4 of Japanese Patent 61-200029 are connected.

17. Claims 1-4, as best understood (see claim objections) are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 in view of Peter, et al, US Patent 5,947,219.

Japanese Patent 60-153418 teaches a vehicle having front and rear wheels (4 and 5) comprising:

- a pair of rear fenders (Figure 1 - see comments below);
- an engine (English Language Abstract); and
- an air intake box (13) supplying intake air to the engine, the air intake box including an intake pipe (14a) connected to and receiving intake air.

Japanese Patent 60-153418 fails to explicitly state that the vehicle is an “all terrain vehicle”. Japanese Patent 60-153418 also fails to teach that the front and rear wheels, the rear fenders and an engine are suspended, attached and mounted, respectively to a frame, at least one ventilation opening on the rear fenders and that the engine is mounted between the rear fenders.

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However, an "all terrain vehicle" is understood to be used "off-road" as well as "on-road". Note that the vehicle of Japanese Patent 60-153418 is described in the title as a "motortricycle". Two or three wheeled motorcycles are generally understood to be capable of being ridden "off-road", in such terrain such as grass, dirt trails, etc., as well as "on-road". Due to this, the "motortricycle" of Japanese Patent 60-153418 may be considered to be an "all-terrain vehicle". All terrain vehicles are advantageous in that they offer the user the possibility of many "expanded" destinations, not accessible by a conventional automobile. Also note that the term "all terrain vehicle" is considered to be a "misnomer", as no vehicle, including Applicant's, is capable of being driven on "all terrain" of the earth, including sides of cliffs and the ocean floor.

Also, Peter teaches a frame (12). A frame is necessary to provide a strong and stable structure on which components such as the wheels, engine and fenders are either directly mounted, or connected to.

Additionally, Peter teaches an opening (Figure 3 - adjacent reference numeral 32) on a rear portion of a rear fender (32). An opening at a rear portion of a rear fender is advantageous where the radiator and fan is installed within a rear fender, such as Japanese Patent 60-153418, so as to allow a smoother and greater flow of air to the radiator than would be possible if there were not openings present and air had to be drawn from the open area around the bottom of the vehicle near the wheels which would require the airflow to take a sharp turn just upstream of the radiator.

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Further, Japanese Patent 60-153418, in combination with the English Language Abstract leaves unclear where the engine is located. However, due to the vehicle configuration and location of the air intake system, the only location that would allow sufficient room, and is proximal to the air intake system and drive wheels is the area under the seat and between the fenders. Note that the purpose of the engine is to provide motive power to the drive wheels.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 60-15348 may be considered an "all terrain vehicle". It also would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 60-15348 would have a frame, as taught by Peter. It additionally would have been obvious to one of ordinary skill in the art at the time the invention was made to include ventilation openings on the vehicle of Japanese Patent 60-15348, as taught by Peter. It further would have been obvious to one of ordinary skill in the art at the time the invention was made that the engine of Japanese Patent 60-15348 would be located between the rear fenders.

Also note regarding the recitation of "An all terrain vehicle" in the preamble of claim 1, Section 2111.02 of the MPEP recites "Any terminology in the preamble that limits the structure of the claim limitation must be treated as a claim limitation....If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states...the purpose or intended use of the invention...then the preamble is not considered a

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limitation...". Since the above preamble recitation only recites intended use and does not contain any structural limitations, any device that meets the limitations of the body of claim 1 will be understood to also meet the preamble limitations since any device that meets the limitations of the body of claim 1 will be able to functionally perform the intended use recited in the preamble.

Regarding the recitation of "rear fenders" (plural) in claim 1, note that the all terrain vehicle may be broadly considered to have a fender on each side of the centerline of the vehicle. Also note that Applicant shows only a single rear fender on Figure 13. See also the claim objection portion of this Office Action.

Regarding the recitation of "radiator" in claim 2, see reference number 7 of Japanese Patent 60-153418. Regarding the recitation of "the radiator drawing intake air from the at least one ventilation opening" in claim 2, note that the combination all terrain vehicle of 60-15348 has a portion (7a of Japanese Patent 60-153418) of the radiator which draws air from the rearward direction. Note that this air would be "drawn" from the ventilation openings of Peter.

Regarding claims 3 and 4, see Figure 1 of Japanese Patent 60-153418.

18. Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 61-200029.

Japanese Patent 61-200029 teaches a vehicle having front and rear wheels suspended from the frame (Figures 1-4) comprising:

a frame on which the front and rear wheels are suspended (Figures 2-4);

an engine (58) mounted on the frame (Figure 3);

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a fender structure (10 - rear portion) overlying at least the rear wheels, the fender structure including at least one aperture (88);

An air intake system in communication with the engine, the air intake system including an air intake box (80) mounted (via vehicle structure) on the frame, the air intake box having an intake pipe (82) having an inlet end, the intake pipe being fastened with respect to the fender structure such that the inlet end is in communication with the aperture in the fender structure and is positioned rearward of the front wheels and higher than the rear wheels (Figures 1-4).

Japanese Patent 61-200029 fails to explicitly state that the vehicle is an "all terrain vehicle".

However, an "all terrain vehicle" is understood to be used "off-road" as well as "on-road". Note that the English Language abstract for Japanese Patent 61-200029 recites "To make it hard for an air cleaner to suck in...up flung dust due to wheels...". This recitation is a clear indication that the vehicle is intended to be used "off-road", as if the vehicle was used only on "paved roads", there would be no "up flung dust". Also note that the "rugged" construction of the frame and suspension system facilitates off-road use of the vehicle. Also note that the term "all terrain vehicle" is considered to be a "misnomer", as no vehicle, including Applicant's, is capable of being driven on "all terrain" of the earth, including sides of cliffs and the ocean floor.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 61-200029 may be considered an "all terrain vehicle".

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Regarding claim 27, see Figure 2, noting the connection of reference number 82, which is configured as a hose to reference number 86 which is configured as a short length of pipe commonly known as a "nipple" and 84. Although not taught by Japanese Patent 61-200029, the Examiner takes Official Notice that hoses, especially where relatively low pressures are involved are commonly attached to pipes or nipples by clamps or clips. An example of a clamp is a "hose clamp" used on many cars. An example of a clip is a "c-clip" also used in cars, on vacuum cleaner hoses etc. A hose clamp is advantageous in that it offers 360 degree clamping of the hose, minimizing the hose coming loose. A "c-clip" is advantageous in that the clip may be installed, or removed without the "joint" being broken. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize a fastener, such as a c-clip where reference numbers 82 and 86 of Figure 4 of Japanese Patent 61-200029 are connected.

19. Claims 7-10 and 12, as best understood (see claim objections) are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 in view of Peter, et al, US Patent 5,947,219.

Japanese Patent 60-153418 teaches a straddle-type vehicle (Figure 1) comprising:

- an engine (English Language abstract);
- a seat (Figure 1); and
- an air intake system (including 13 and 14a) operatively (English Language abstract) connected to the engine.

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Japanese Patent 60-153418 fails to teach at least one opening adjacent a rear portion of the seat which supplies intake air to the air intake system and that the front portion of the seat is positioned generally above the engine. The drawing Figures in combination with the English Language Abstract also leave unclear the exact location of the engine.

However, Peter teaches an opening an opening (Figure 3 - adjacent reference numeral 32) on a rear portion of a rear fender (32). An opening at a rear portion of a rear fender is advantageous where the radiator and fan is installed within a rear fender, such as Japanese Patent 60-153418, so as to allow a smoother and greater flow of air to the radiator than would be possible if there were not openings present and air had to be drawn from the open area around the bottom of the vehicle near the wheels which would require the airflow to take a sharp turn just upstream of the radiator.

Also, Japanese Patent 60-153418, in combination with the English Language Abstract leaves unclear where the engine is located. However, due to the vehicle configuration and location of the air intake system, the only location that would allow sufficient room, and is proximal to the air intake system and drive wheels is the area under the seat. Note that the engine located at any location under the seat would meet the limitation of "a seat having a front portion positioned generally above the engine", since the "front portion" of the seat may be considered the front-half of the seat and this "front portion" would be at least "generally" above the engine.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize at least one opening adjacent a rear portion of the seat in order to supply intake air to the air intake system of Japanese Patent 60-153418, as taught by Peter. It also would have been obvious to one of ordinary skill in the art at the time the invention was made that the front portion of the seat is positioned generally above the engine of Japanese Patent 60-153418.

Regarding claim 8, see Figure 3 of Peter and the claim objection portion of this Office Action.

Regarding claim 9, see Figure 4 of Japanese Patent 60-153418, particularly reference number 7a.

Regarding claim 10, see Figure 1 of Japanese Patent 60-153418 and Figure 3 of Peter. See also the claim objection portion of this Office Action.

Regarding claim 12, see Figure 3 of Peter and Figure 1 of Japanese Patent 60-153418.

20. Claim 11, as best understood (see claim objections), is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 and Peter, et al, US Patent 5,947,219, as applied to claim 8, and further in view of Japanese Patent 5147565.

The combination straddle-type vehicle of Japanese Patent 60-153418 teaches a pair of openings (Figure 3 of Peter). The combination straddle-type vehicle of Japanese Patent 60-153418 fails to teach that the most, or all of the rear portion of the seat is disposed "between" the

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openings. The combination straddle-type vehicle of Japanese Patent 60-153418 teaches only a portion of the rear portion of the seat is disposed "between" the openings (Figure 3 of Peter).

However, Japanese Patent 5147565 teaches openings (43) in the side of a rear fender (37). Openings at the side of a rear fender, in addition to openings at the rear of a rear fender are advantageous to provide the opportunity for adequate, or additional airflow, especially in the event that an object is placed over the rear openings by the rider while the straddle-type vehicle is in use.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize openings in the side, as well as the rear of the rear fender of the combination straddle-type vehicle of Japanese Patent 60-153418, as taught by Japanese Patent 5147565.

Note that the addition of the side openings of Japanese Patent 5147565 to the combination straddle-type vehicle of Japanese Patent 60-153418 will meet the claim 11 limitation "the rear portion of the seat is disposed between the openings".

21. Claims 18-21, as best understood (see claim objections), are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 in view of Peter, et al, US Patent 5,947,219.

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Japanese Patent 60-153418 teaches a straddle-type vehicle having front and rear wheels (Figure 1) and being capable of traversing water having a predetermined depth (say 1"), the vehicle comprising:

- an engine (English Language abstract);
- an air intake box (13).

Japanese Patent 60-153418 fails to teach at least one opening in communication with the air box, the at least one opening being positioned on the vehicle rearward of the front wheels so that a height of the opening is greater than the predetermined depth of the water, the at least one opening being positioned on the vehicle so as to avoid water entering the at least one opening due to encountering a water wave created in front of the vehicle that has a wave depth greater than the predetermined depth of the water.

However, Peter teaches an opening (Figure 3 - adjacent reference numeral 32) on a rear portion of a rear fender (32). An opening at a rear portion of a rear fender is advantageous where the radiator and fan is installed within a rear fender, such as Japanese Patent 60-153418, so as to allow a smoother and greater flow of air to the radiator than would be possible if there were not openings present and air had to be drawn from the open area around the bottom of the vehicle near the wheels which would require the airflow to take a sharp turn just upstream of the radiator.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize at least one opening adjacent a rear portion of the seat in order to supply intake air to the air intake system of Japanese Patent 60-153418, as taught by Peter.

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Also, note that the at least one opening of Peter when applied to the air intake system of Japanese Patent 60-153418 is positioned on the vehicle rearward of the front wheels (Figure 1 of Japanese Patent 60-153418 and Figure 3 of Peter) so that a height of the opening is greater than the predetermined depth (1") of the water, the at least one opening being positioned (at a relatively high height and rearward location on the vehicle) on the vehicle so as to avoid water entering the at least one opening due to encountering a water wave created in front of the vehicle that has a wave depth greater than the predetermined depth of the water.

Regarding claim 19, the combination straddle-type vehicle of Japanese Patent 60-153418 does not explicitly teach a frame, or that the engine is mounted to the frame. However, a frame is necessary to support an engine and to provide proper strength to the vehicle. Also, it is necessary to mount an engine on the frame in order to properly support it, due to the relative weight and "reaction torque" of the engine when in use. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the combination straddle-type vehicle of Japanese Patent 60-153418 would have a frame and that the engine would be mounted on the frame. Regarding the recitation of "the at least one opening being provided within at least one of the rear fenders" in claim 19, see Figure 3 of Peter and the claim objection portion of this Office Action. Regarding the recitation of "rear fenders" (plural) in claim 19, note that the straddle-type vehicle may be broadly considered to have a fender on each side of the

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centerline of the vehicle. Also note that Applicant shows only a single rear fender on Figure 13. See also the claim objection portion of this Office Action.

Regarding claim 20, note that Figure 3 of Peter teaches an "opening" on each side of the centerline of the rear fender of Peter. See also the comments for claim 19 above regarding the recitation of "rear fenders" and the claim objection portion of this Office Action.

Regarding claim 21, see Figure 4 of Japanese Patent 60-153418, particularly reference numbers 7 and 13.

22. Claims 25, 26, 28, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 in view of Peter, et al, US Patent 5,947,219.

Japanese Patent 60-153418 teaches a vehicle having front and rear wheels (4 and 5) comprising:

a fender structure overlying the rear wheels (Figure 1);

an engine (English Language Abstract); and

An air intake system (including 13 and 14a) in communication with the engine (English Language abstract), the air intake system including an air intake box (13), the air intake box having an intake pipe ("curved pipe" in Figure 4 just "upstream" of radiator portion 7a) having an inlet end, the intake pipe being fastened with respect to the fender structure such that the inlet end is in communication with the aperture in the fender structure and is positioned rearward of the front wheels (Figure 1).

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Japanese Patent 60-153418 fails to explicitly state that the vehicle is an “all terrain vehicle”. Japanese Patent 60-153418 also fails to teach that the front and rear wheels and an engine and air intake box are suspended, and mounted, respectively to a frame, at least one aperture on the fender structure and that the inlet end of the intake pipe is higher than the rear wheels.

However, an “all terrain vehicle” is understood to be used “off-road” as well as “on-road”. Note that the vehicle of Japanese Patent 60-153418 is described in the title as a “motortricycle”. Two or three wheeled motorcycles are generally understood to be capable of being ridden “off-road”, in such terrain such as grass, dirt trails, etc., as well as “on-road”. Due to this, the “motortricycle” of Japanese Patent 60-153418 may be considered to be an “all-terrain vehicle”. All terrain vehicles are advantageous in that they offer the user the possibility of many “expanded” destinations, not accessible by a conventional automobile. Also note that the term “all terrain vehicle” is considered to be a “misnomer”, as no vehicle, including Applicant’s, is capable of being driven on “all terrain” of the earth, including sides of cliffs and the ocean floor.

Also, Peter teaches a frame (12). A frame is necessary to provide a strong and stable structure on which components such as the wheels, engine and air intake box are either directly mounted, or connected to.

Additionally, Peter teaches an aperture (Figure 3 - adjacent reference numeral 32) on a rear portion of a rear fender (32) that is located higher than the rear wheels. An aperture at a rear

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portion of a rear fender is advantageous where the radiator and fan is installed within a rear fender, such as Japanese Patent 60-153418, so as to allow a smoother and greater flow of air to the radiator than would be possible if there were not openings present and air had to be drawn from the open area around the bottom of the vehicle near the wheels which would require the airflow to take a sharp turn just upstream of the radiator. A location of the aperture higher than the rear wheels is advantageous in that dust and debris that may be thrown-up by the rear tiers are less likely to enter the aperture at a higher location due to the effect of gravity. Note that the intake pipe of Japanese Patent 60-153418 when combined with the teaching of the aperture of Peter would be required to be curved upward to be aligned with the aperture of Peter. Note that with the intake pipe curved "upward" and toward the aperture, that the inlet end would now be higher than the rear wheels. Note also that the aperture would be in "communication" with the aperture, as air drawn through the aperture by engine vacuum would then flow into the intake pipe.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 60-15348 may be considered an "all terrain vehicle". It also would have been obvious to one of ordinary skill in the art at the time the invention was made that the vehicle of Japanese Patent 60-15348 would have a frame, as taught by Peter. It additionally would have been obvious to one of ordinary skill in the art at the

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time the invention was made to include an aperture on the fender structure of Japanese Patent 60-15348, as taught by Peter.

Also note regarding the recitation of "An all terrain vehicle" in the preamble of claim 25, Section 2111.02 of the MPEP recites "Any terminology in the preamble that limits the structure of the claim limitation must be treated as a claim limitation....If the body of a claim fully and intrinsically sets forth all of the limitations of the claimed invention, and the preamble merely states...the purpose or intended use of the invention...then the preamble is not considered a limitation...". Since the above preamble recitation only recites intended use and does not contain any structural limitations, any device that meets the limitations of the body of claim 25 will be understood to also meet the preamble limitations since any device that meets the limitations of the body of claim 1 will be able to functionally perform the intended use recited in the preamble.

Regarding claim 26, see Figure 4 and particularly reference number 7a. Regarding the recitation of "a radiator positioned adjacent the engine" in claim 4, note that Japanese Patent 60-153418, in combination with the English Language Abstract leaves unclear where the engine is located. However, due to the vehicle configuration and location of the air intake system, the only location that would allow sufficient room, and is proximal to the air intake system and drive wheels is the area under the seat and between the fenders. Note that this location is "adjacent" the radiator. Also note, that as previously set forth in this Office Action that Webster's Collegiate Dictionary, 10th Edition, defines "adjacent" as: "not distant". Therefore, it would

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have been obvious to one of ordinary skill in the art at the time the invention was made that the engine of Japanese Patent 60-15348 would be located between the rear fenders.

Regarding claim 28, see Figure 4 of Japanese Patent 60-153418.

Regarding claim 30, see Figure 1 of Japanese Patent 60-153418 and comments above concerning the location of the "combination" intake pipe of Japanese Patent 60-153418 and Peter.

Regarding claim 31, see Figure 3 of Peter.

23. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese Patent 60-153418 and Peter, et al, US Patent 5,947,219, as applied to claim 25 and further in view of Japanese Patent 1301484.

The combination all terrain vehicle of Japanese Patent 60-153418 teaches an aperture (9) on the forward end of the fender structure and an intake pipe (10) with a "bent" portion (Figure 2) such that the inlet end faces a front end of the vehicle. Japanese Patent 60-153418 in combination with the English Language abstract leaves unclear that this structure is associated with the air intake of an engine.

However, Japanese Patent 1301484 teaches an intake system that draws air both from the rear and forward direction of the vehicle. This is advantageous in that when the vehicle is idling, the "dual" intake locations provide sufficient airflow. When the vehicle is traveling at high

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speeds, the forward intake location provides greater power and efficiency by “supercharging” the intake air.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the front aperture and intake pipe facing forward of Japanese Patent 60-153418 for intake air to the engine, as taught by Japanese Patent 1301484.

Note that in order to accomplish this, that some minor “plumbing” modifications may be required so that the intake pipe is directly receiving “supercharged” air from the aperture and that this supercharged air is directed to the airbox. There “plumbing” modifications are considered within the skill level of one of ordinary skill in the art. Note that per Section 2144 of the MPEP it is considered within the skill level of one of ordinary skill in the art to rearrange parts.

Conclusion

24. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- A) Mizuata, et al - teaches an air intake on an upper portion of a vehicle
- B) Gordon - teaches an air intake system
- C) Furuhashi, et al - teaches an air vent on a seat (Figure 19)
- D) Fukuda - teaches an air inlet under a seat
- E) Slayden - teaches an ATV with a cover

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F) Usui - teaches an all terrain vehicle


G) Gagnon, et al - teaches an all terrain vehicle

H) Japanese Patent 431189 - teaches air intake at rear of motorcycle inside a seat

25. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Bryan Fischmann whose telephone number is (703) 306-5955. The examiner can normally be reached on Monday through Friday from 7:30 to 4:00.

If attempts to reach the Examiner by telephone are unsuccessful, the examiner's supervisor, Brian Johnson, can be reached on (703) 308-0885. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-7687.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1113.

 16-B-2
BRYAN FISCHMANN
PATENT EXAMINER